

In The Claims

1. (Withdrawn) A method of reducing restenosis in a patient vessel, comprising:

implanting a stent in the vessel,

the stent having a surface and a first member of a specific binding pair disposed on the surface; and a

administering locally to the patient a restenosis-inhibiting moiety comprising a second member of the specific binding pair.

2. (Withdrawn) The method of claim 1, wherein administering locally to a patient a restenosis-inhibitory moiety comprises administering locally a radioactive moiety.

3. (Withdrawn) The method of claim 1, wherein administering locally to a patient a restenosis-inhibitory moiety comprises administering locally a neutron-capture moiety, the method further comprising exposing the stent to a neutron flux.

4. (Withdrawn) The method of claim 1 wherein the first member of the specific binding pair comprises a biomolecule selected from among the group consisting of:

protein, nucleic acid, carbohydrate, lipid, RNA, DNA, antibody, antigen, epitope, lectin, receptor, ligand, avidin, streptavidin, biotin, heparin, or protamine.

5. (Withdrawn) The method of claim 1 wherein the second member of the specific binding pair comprises a biomolecule selected from among the group consisting of:

protein, nucleic acid, carbohydrate, lipid, RNA, DNA, antibody, antigen, epitope, lectin, receptor, ligand, avidin, streptavidin, biotin, heparin, or protamine.

6. (Withdrawn) The method of claim 1 wherein the first member is immobilized directly to the stent.

7. (Withdrawn) The method of claim 1 wherein the first member is immobilized to a coating disposed on the stent.

8. (Withdrawn) The method of claim 2, wherein administering locally to a patient a restenosis-inhibitory moiety comprises administering locally a radioactive moiety selected from among the group consisting of:

yttrium-90, iodine-125, iodine-132, iodine-131, iridium-192, phosphorous-32, rhenium-186, rhenium-188, holmium-166, praseodymium-142, lanthanum-140, dysprosium-165, samarium-153, copper-64, copper-67, gold-198, erbium-169, palladium-103, palladium-109, cobalt-57, cobalt-60, or vanadium-48.

9. (Withdrawn) The method of claim 3, wherein administering locally to a patient a restenosis-inhibitory moiety comprises administering locally a neutron-capture moiety selected from among the group consisting of:

actinium, boron, cadmium, cadmium-113, dysprosium, dysprosium-164, erbium, europium, europium-151, gadolinium, gadolinium-152, gadolinium-153, gadolinium-155, gadolinium-157, gold, hafnium, indium, iridium, mercury, holmium, holmium-165, plutonium, protactinium, rhodium, samarium, samarium-149, samarium-152, or thulium.

10. (Withdrawn) The method of claim 1 further comprising repeating, at least one time, the step of administering locally a restenosis-inhibiting moiety.

11. (Withdrawn) The method of claim 2 further comprising repeating, at least one time, the step of administering locally a radioactive moiety.

12. (Withdrawn) The method of claim 3 further comprising repeating, at least one time, the step of administering locally a neutron-capture moiety.

13. (Withdrawn) The method of claim 3 further comprising repeating, at least one time, the step of exposing the stent to a neutron flux.

14. (Currently Amended) A kit for inhibiting restenosis in a patient vessel, the kit comprising:
an expanding tubular structure having a surface and a first member of a specific binding pair immobilized to the surface; and

a restenosis-inhibiting moiety configured for local administration and comprising a second member of the specific binding pair capable of binding to the first member.

15. (Currently Amended) The kit of claim 14, wherein the ~~restenosis-inhibiting moiety~~ second member is a radioactive moiety.

16. (Original) The kit of claim 14 wherein the restenosis-inhibiting moiety is a radioactive moiety selected from among the group consisting of:

yttrium-90, iodine-125, iodine-132, iodine-131, iridium-192, phosphorous-32, rhenium-186, rhenium-188, holmium-166, praseodymium-142, lanthanum-140, dysprosium-165, samarium-153, copper-64, copper-67, gold-198, erbium-169, palladium-103, palladium-109, cobalt-57, cobalt-60, or vanadium-48.

17. (Withdrawn) The kit of claim 14, wherein the restenosis-inhibiting moiety is a neutron-capture moiety.

18. (Withdrawn) The kit of claim 14 wherein the restenosis-inhibiting moiety is a neutron-capture moiety selected from among the group consisting of:

actinium, boron, cadmium, cadmium-113, dysprosium, dysprosium-164, erbium, europium, europium-151, gadolinium, gadolinium-152, gadolinium-153, gadolinium-155, gadolinium-157, gold, hafnium, indium, iridium, mercury, holmium, holmium-165, plutonium, protactinium, rhodium, samarium, samarium-149, samarium-152, or thulium.

19. (Currently Amended) The kit of claim 14, further comprising a catheter for administering the restenosis-inhibiting moiety.

20. (Currently Amended) The kit of claim 14, further comprising an agent for selectively disrupting the specific binding pair.

21. (New) The kit of claim 14, wherein the first member is immobilized to a coating covering at least a part of the surface.

22. (New) The kit of claim 14, wherein the first member is immobilized to an expandable film lining the surface.

23. (New) The kit of claim 14, wherein the first member is immobilized by creating one or more types of chemical bonds between the first member and the surface.

24. (New) The kit of claim 23, wherein the one or more types of chemical bonds are created between a chemical functional group possessed by the first member and a complementary functional group on the surface.

25. (New) The kit of claim 24, wherein the complementary functional group is possessed by a linker moiety attached to the first member.

26. (New) The kit of claim 23, wherein the surface is derivatized by bonding to the surface chemical moieties that possess chemical functional groups capable forming a bond with the first member.

27. (New) The kit of claim 14, wherein the second member is capable of binding to the first member irreversibly, effectively irreversibly, or reversibly.

28. (New) The kit of claim 14, wherein the first member is a protein or glycoprotein, polypeptide, oligopeptide,

or peptide, and the second member is an antibody, or a related antigen or epitope binding protein that specifically recognizes and binds the first member.

29. (New) The kit of claim 14, wherein the first member is an epitope tag, and the second member is an antibody that specifically binds the epitope tag.

30. (New) The kit of claim 15, wherein the second member is connected to a radioactive moiety via a molecular linker.

31. (New) The kit of claim 15, wherein the radioactive moiety comprises a chelating group binding a radioactive atom.

32. (New) The kit of claim 15, wherein the radioactive moiety comprises radioisotopes, and wherein the radioactive decay products absorbed by the patient vessel are controlled and defined by combining different radioisotopes.

33. (New) The kit of claim 15, wherein the first and second members can be enzymatically or chemically cleaved.

34. (New) The kit of claim 15, wherein more than one species of a first member can be immobilized, wherein the pattern and density with which different first members are immobilized are different among the one or more species of the first member, and wherein the radioactive moiety comprises radioisotopes, thereby causing different radioisotopes with

distinct half-lives and decay products to be immobilized to the surface in variable patterns and densities.

35. (New) The kit of claim 15, wherein the radioactive moiety is immobilized to the surface, and wherein a diffusible restenosis inhibitory agent is incorporated in a polymer or other coating applied to the surface.